

# **Investigating Sensory and Physical Perception in the Architectural Space of the Traditional Bazaar of Kermanshah**

## **Abstract**

The issue of the affiliation between man and environment have been the focus of attention of many experts in various sciences during the past four decades. Although the scientific look at the phenomenon of connection between man and place is not a new category, there are still many questions about how to define the relationship between man and place for use in the architectural design process. Understanding the problem of sensation and body perception in traditional architecture is the main concern of this study. The method of the current research is qualitative with a phenomenological approach that seeks to analyze the representation of sensation and bodily perception in the experience of architectural space. The data collection method is using semi-structured and semi-in-depth interviews. Based on the logic of theoretical saturation, sixteen people were selected, seven women and nine men. The data analysis method of this research is thematic analysis and the findings are presented in the form of a conceptual model in three contexts/conditions, and the spatial situation is presented in the form of three categories. In the next step, the results were categorized into four categories and in this manner, the core category for the dimension of adaptability was presented in the form of surrounding the body and emotions in the security and spirituality of the bazaar space. Concerning the environment of the Kermanshah bazaar, it can be stated the marketplace embraces the person's body with its shape and structure and grants security as the person defines oneself in the open environment with sensory and conscious communication; thus, the person finds connection with the past and easily communicates with the spirit of this place.

## **Research aims:**

١. Analysis of sensory representation and body perception in architectural space experience.

۲. Investigating sensation and bodily perception in the experience of architectural space in the traditional bazaar of Kermanshah.

### **Research questions:**

۱. What is the role of physical and sensory perception in the experience of space in architecture?
۲. As a source of inspiration for experiencing the architectural space, what role do physical perception have in understanding the traditional bazaar of Kermanshah?

**Keywords:** Sensation, body perception, traditional bazaar of Kermanshah, security, spirit of space

## **Introduction**

According to Norberg Schultz (۱۹۸۵), the main function of architectural art is to present the place. Meeting the place is recognized by making. In his opinion, the identity of a place causes the identity of a person. In this manner, if a person is placed in a place in which no connections can be made, no memories will be evoked in the mind with no or very little sense of belonging; thus, the person becomes empty from the inside and loses his/her identity. Therefore, from a phenomenological point of view, a place is more than an abstract form; it is a general place that is generated of real objects and items and beholds materials, constituents, shapes and colors. The set of these elements together define the character of the environment. For human intervention in the environment, humans must know the main character of the place and create environments that are in harmony with the desired character.

The sense of place means people's mental perception of the environment and their more or less conscious feelings about their environment, which places a person in an internal relationship with the environment, consequently, the understanding and feeling of the person is connected and integrated with the semantic context of the environment. This sense is a factor that transforms a space into a place with special sensory and behavioral characteristics for certain people. The sense of place, in addition to instigating a feeling of comfort from the environment from cultural concepts desired by people, supports and aids people reminisce their past experiences and achieve identity. With this explanation, it can be understood that life and its position are closely connected with

each other and humans as existential beings need to understand the spirit of place. This understanding requires knowledge of the environment and its characteristics

In many cases, this relationship with space and place is not formed for specific reasons and in different environments. Old buildings and the lack of compatibility of many old structures with the requirements of new life have triggered a decrease in the quality of life and also a diminution in the attachment to the place of the residents of these neighborhoods. Life in these contexts as much as it needs to feel the same with the events, memories and roots, it also needs to believe in the occurrence of new changes within them. Changes that focus on revitalizing the fabric with the principle of paying attention to the residents and the needs of people who are in a spatial and historical relationship with the space. Today, in many historical sites of the country's cities, including the traditional bazaar of Kermanshah (Tarike Bazaar), the issue of belonging in mental, physical and functional components is a serious challenge. The weakness of the sense of belonging has led to the disconnection or non-formation of the connection threads of the inhabitants of the historical context with the place, although they are physically present in these places, but in terms of belongingness, sensibility and identity, they consider themselves a separate part of it.

The review of the background of the research indicates that there has been no independent research on this subject. However, some works have investigated the sensibility in traditional architecture. In an article entitled "Qualitative evaluation of sensory dimensions of space in historical markets from the perspective of users (case study: Qazvin market)", Samadi et al have consider this type of place as a multi-sensory place and have evaluated traditional historical markets as a combination of all sensory stimuli. Of course, in this work, the topic discussed in the current research is not discussed.

In the current research, we are looking for the investigation of sensuality and bodily perception in the experience of the architectural space in the traditional market of Kermanshah, so that in this way we can examine the sensory factors as well as direct existential and individual factors in the reinterpretation of the architectural space of the Kermanshah bazaar. According to this goal, the following questions are raised in this research:

- According to the physical perception and feeling as a source of inspiration for experiencing the architectural space, what role do they play in understanding the traditional bazaar of Kermanshah?

- What conditions affect the intertwining of human senses in the perception of space?
- What is the nature of space based on physical perception and physicality?
- What are the consequences of introducing the perceptual system of the body and human senses for our awareness of space?
- How will the reading of space be manifested by introducing the element of physical perceptions?
- How are bodily perceptions and the sight-based perspective compatible with each other?

The method of this qualitative research, using the phenomenological approach, is to analyze the representation of sensation and bodily perception in the experience of architectural space. The method of data collection is using semi-structured and semi-in-depth interviews so that the interviewee has sufficient action power to express his intentions and experience during the research. The researcher's observations also play a key and important role in data collection. The statistical population of this research consists of people visiting the traditional bazaar of Kermanshah. The reason for choosing this place is related to the structure and the elements that the researcher has chosen according to the topic and work method. To select the participants, a purposeful and criterion-oriented sampling method is used; also, theoretical sampling is used to determine the number of people, determine the location of the data and find research directions. For both samplings, our criterion is to reach theoretical saturation and not to repeat propositions. The meaning of theoretical saturation is filling the space of a concept or category and the absence of new data; nonetheless, saturation is more than a lack of new data. Saturation refers to the development of concepts according to the meaning attached to them and based on contents and dimensions (Glasser and Strauss, ۲۰۱۲: ۸۹). Based on the theoretical saturation logic, sixteen people were selected at the same time as the interviews, seven women and nine men. The data analysis method of this research is using thematic analysis. In this way: The recorded interviews were implemented, categorized and organized, and then using thematic or thematic analysis method - which is common in phenomenology - the collected data were categorized based on the research questions and objectives; furthermore, they are interpreted in relation to each other. Thematic analysis is an analysis based on analytical induction in which the researcher achieves an analytical genealogy through data classification and pattern finding within and outside the data. In the next step, the researcher in three parts; The first part deals with the conditions or reasons that

affect the interpretive situation of these people, the second part deals with the consequences of this on their interpretation and the third part deals with the compatibility or lack of compatibility of these interpretations with the existing theories, analyzing the interviews and the obtained data. Finally, the relevant research model was extracted.

## **Conclusion**

Movement in architecture will lead to the understanding of space; therefore, movement has been a significant factor in all architectural spaces from ancient Egypt and Greece to contemporary architectural movements. With the progress of science in contemporary periods and the emergence of new concepts of time and space, attention to this factor intensified and the movements brought new concepts into the field of art. This spatial perception is fluid and becoming; this means that we are not faced with a still and peaceful atmosphere that imposes spatial perception on the individual. Beside these rigid and often rough buildings, a movement can be seen that has an impact and engages the person with his/her inner thoughts. The parts as a whole together and despite the fluidity that exists between them, become meaningful for the individual and movement is the basic element that they include in their interpretations.

Consequently, one of the central points in understanding the space that interacts with awareness and movement can affect this reading is the discussion of being experienced in such a space, which can be understood by simply being in such a place. Man and the factor of time cause various experiences and different feelings to appear in space. According to Zoi's opinion, the presence of space and experiencing it up close, becoming a part of space and being a constituent of space and viewing space by moving in it, is the most suitable tool for understanding and experiencing architectural space. A person can reach this understanding by touching this space and involving himself with it, and such a thing never corresponds to distancing and being away from that place. Undoubtedly, the meaning and concept of movement in art is beyond the physical dimension. In art, movement is a means to understand and perceive space, and it can be called the flight of the soul or leaving the material world and traveling to the world of imagination. In this space, the body considers itself embedded in an environment that beholds a soul and spirit; and that it is trying to reinterpret itself by being aware of it, and in this way, the body becomes a base for knowing,

feeling, and understanding the environment. It becomes and gives itself a new meaning which was investigated in this research in the bazaar of Kermanshah. The results of this research were presented in the form of a conceptual model in three contexts/conditions, and the spatial situation was presented in the form of three categories, and in the next step, the results were categorized in four categories, and in this way, the core category for the adaptation dimension was presented in the form of surrounding the body and emotions in the security and spirit of the bazaar. The environment of the bazaar embraces the human body with its shape and structure and grants it security to the human body and the human defines himself in the open environment with sensory and conscious communication, in relation to the past and also to meet human needs and communicate with the spirit of this place. The spatial understanding of the market in this research has been an idea that a person is actively formed by being in a place and using the awareness and reading they have of their surroundings. This perception is fluid and becoming and as it is accompanied by movement, it is far from static.

## References

- Abbasi, Zahra; Habib, Farah and Mokhtabadameri, Seyed Mostafi. (۱۳۹۷). A new review on sensory perception in Iranian-Islamic bazaar architecture (case example: Kashan bazaar). The role of the world - theoretical studies and new technologies of architecture and urban planning, ۸ (۳). [In Persian].
- Akbari, Ali; Flamaki, Mohammad Mansour. (۱۳۹۵). "Investigation of the position of "sensory perceptions" and "emotion" in the phenomenology of built space", Iranian Anthropological Researches (Social Sciences Journal), Volume ۶, Number ۱. [In Persian].
- Arnheim, Rudolf. (۱۹۷۴). The dynamics of architectural forms, translated by Mehrdad Qayyomi Bed Handi, Tehran: Publications of the Ministry of Culture and Islamic Guidance, second edition, Tehran: Iran. [In Persian].
- Benson, C. (۱۹۸۹). The Cultural Psychology of Self: Place, Morality and Art in Human Worlds: Taylor & Francis.
- Falahat, Mohammad Sadiq. (۱۳۹۶). The concept of sense of place and its shaping factors, Fine Arts Journal, No. ۲۶. [In Persian].
- Grueter, Jörg Kurt. (۱۹۷۴). Aesthetics in Architecture, translated by Jahan-Shah Pakzad and Abdul Reza Homayun, ۴th edition, Tehran: Shahid Beheshti University, Tehran. [In Persian].
- Habib Ranjbari, Shadi; Akbari Namdar, Shabnam and Salek Zamkhani, Jalal. (۱۳۹۱). "The concepts of the sense of movement in architecture, the first national conference of new ideas and technologies in architecture. [In Persian].

Hatami Golzari, small calligrapher. (۲۰۱۹). "Qualitative investigation of the architectural durability of the Tabriz bazaar complex from the perspective of phenomenology", Andisheh Memari, No. ۴. [In Persian].

Merleau-Ponty, Mauritius. (۲۰۱۱). The World of Perception, translated by Farzad Jabralansar, Tehran: Qafnos Publications. [In Persian].

Moradi, Mansour; Sheikhan, Farshad and Hadian Far, Mohammad. (۲۰۱۶). "The role of the sense of place in restoring identity to historical places (with a case study: Kermanshah traditional market)", International Urban Architecture Conference, Turkey (Istanbul).

Nagin Naji, Samad; Mojtabi, Ansari and Pourmand, Hassan Ali. (۲۰۱۶). "Explaining the relationship between man and place in the architectural design process with a phenomenological approach", Architecture and Urban Planning (Fine Arts), Volume ۲۲, Number ۴. [In Persian].

Nami, Gholam Hossein. (۱۳۸۷). Basics of visual arts, Tehran: Tos publishing house. [In Persian].

Norberg Schultz, Christine. (۲۰۰۷), The Spirit of Place, translation; Mohammad Reza Shirazi, Tehran: Anshart of Khwarazmi University. [In Persian].

Nusrati, Merallo; Reza, Bahram Waziri, Farahani and Ghasemi Baghdadi. (۲۰۱۱). "The manifestation of the meanings and concepts of movement in the formation of contemporary Iran puzzle", the first national conference of new ideas and technologies in architecture. [In Persian].

Legal Nia, Nima. (۲۰۱۷). "Analysis of the idea of multi-sensory architecture with an emphasis on traditional Iranian markets", the third international conference on civil engineering, architecture and urban design. [In Persian].

Samadi, Javad; Sattarzadeh, Dariush and Belilan Assal, Lida. (۲۰۱۸). "Qualitative evaluation of sensory dimensions of space in historical markets from the perspective of users (case study: Qazvin market)", Bagh Nazar, No. ۸۱. [In Persian].

Schultz, Christian Norberg. (۲۰۰۲). Architecture: presence, language and place, translated by Alireza Seyyed Alavian, Tehran: Nilofar Publications. [In Persian].

Strauss, Anselm; Juliet, Corbin. (۲۰۱۱). Fundamentals of qualitative research (techniques and stages of producing grounded theory), translated by Ebrahim Afshar, second edition, Tehran: Nei Publishing. [In Persian].

Rapaport, A. (۱۹۹۳). The invention of architecture from caves to cities, Understanding, Roth, Leland. Craftsman house.